IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A medical device adapted for implantation into a patient, comprising:

an implantable housing;

a temperature sensor for measuring a temperature within the patient's body and generating temperature signals in accordance therewith;

sampling circuitry and an analog-to-digital converter for producing digitized samples of a signal received from the temperature sensor;

a controller for processing and storing temperature data derived from the temperature signals;

wherein the temperature sensor, sampling circuitry, and controller are contained within the implantable housing ~~is located within a housing for the device~~.

2. (Original) The device of claim 1 wherein the temperature sensor utilizes a proportional-to-absolute-temperature (PTAT) current source to generate a temperature signal.

3. (Original) The device of claim 2 further comprising:

a PTAT current source;

first and second oscillators;

a counter; and,

wherein the PTAT current source feeds into the first oscillator in order to generate a clock signal with a frequency proportional to the PTAT current, and the counter compares the first oscillator clock frequency to a stable timebase generated by the second oscillator in order to generate a number that is proportional to temperature.

4. (Original) The device of claim 1 wherein the temperature sensor is a thermistor.

5. (Original) The device of claim 1 wherein the temperature sensor is a thermocouple.

6. (Original) The device of claim 1 further comprising a shock pulse generator for delivering cardiac shock therapy.

7. (Original) The device of claim 6 wherein the controller is configured to not gather temperature measurements during periods when shock therapy is being delivered.

8. (Original) The device of claim 6 wherein the controller is configured to flag temperature measurements taken during periods when shock therapy is being delivered.

9. (Original) The device of claim 6 wherein the shock pulse generator includes an electrolytic capacitor and wherein the controller is programmed to reform the capacitor.

10. (Original) The device of claim 9 wherein the controller is configured to not gather temperature measurements during periods when the capacitor is being reformed.

11. (Original) The device of claim 9 wherein the controller is configured to flag temperature measurements taken during periods when the capacitor is being reformed.

12. (Original) The device of claim 1 wherein the controller is programmed to monitor temperatures before implantation of the device.

13. (Original) The device of claim 12 wherein the controller is programmed to measure temperature periodically before implantation of the device.

14. (Original) The device of claim 13 wherein the controller is programmed to set an alarm flag if the measured temperature ever leaves safe storage temperature limits.

15. (Original) The device of claim 14 wherein the controller is programmed to announce the alarm flag when interrogated by an external programmer.

16. (Original) The device of claim 12 wherein the controller is programmed to log minimum and maximum storage temperatures.

17. (Original) The device of claim 12 wherein the controller is programmed to issue an alarm if the present device temperature is not inside safe operational temperature limits.

18. (Original) The device of claim 1 wherein the device is a cardiac rhythm management device having at least one sensing channel for sensing cardiac electrical activity.

19. (Original) The device of claim 18 wherein the controller is configured to associate a temperature measurement with a simultaneously measured heart rate.

20. (Original) The device of claim 18 further comprising an exertion level sensor and wherein the controller is configured to associate a temperature measurement with a simultaneously measured exertion level.